

## 510(k) Summary

**Submitter's Name/Address**

Abbott Laboratories  
1920 Hurd Drive  
Irving, Texas 75038

**Contact Person**

Linda Morris  
Senior Regulatory Affairs Specialist  
(972) 518-6711  
Fax (972) 753-3367

**Date of Preparation of this Summary:**

September 4, 1998

**Device Trade or Proprietary Name:**

TBil

**Device Common/Usual Name or Classification Name:** Total Bilirubin**Classification Number/Class:**

Class II

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

The assigned 510(k) number is: K983133

**Test Description:**

Total Bilirubin is an *in vitro* diagnostic assay for the quantitative determination of total bilirubin in human serum or plasma. The Total Bilirubin assay is a clinical chemistry assay in which the conjugated bilirubin is oxidized to biliverdin. The resulting decrease in absorbance at 444 nm is directly proportional to the concentration of total bilirubin.

**Substantial Equivalence:**

The Total Bilirubin assay is substantially equivalent to the following device:

Total Bilirubin (K962919) on the Johnson & Johnson® Vitros™ System.

Both assays yield similar Performance Characteristics.

**Similarities:**

- Both assays are *in vitro* clinical chemistry methods.
- Both assays can be used for the quantitative determination of total bilirubin.
- Both assays yield similar clinical results.
- Both assays are based on the oxidation of bilirubin to biliverdin

**Differences:**

- There is a difference between the assay range.

**Intended Use:**

The Total Bilirubin assay is used for the quantitation of total bilirubin in human serum or plasma.

**Performance Characteristics:**

Comparative performance studies were conducted using the AEROSSET™ System. The Total Bilirubin assay method comparison yielded acceptable correlation with the Total Bilirubin on the Johnson & Johnson Vitros System. The correlation coefficient = 0.994, slope = 1.055, and Y-intercept = 0.009 mg/dL. Precision studies were conducted using the Total Bilirubin assay. Within-run, between-run, and between-day studies were performed using two levels of control material. The total %CV for Level 1/Panel 101 is 5.6% and Level 2/Panel 102 is 4.3%. The Total Bilirubin assay is linear up to 23.38 mg/dL. The limit of quantitation (sensitivity) for the Total Bilirubin assay is 0.13 mg/dL. These data demonstrate that the performance of the Total Bilirubin assay is substantially equivalent to the performance of the Total Bilirubin on the Johnson & Johnson Vitros System.

**Conclusion:**

The Total Bilirubin assay is substantially equivalent to the Total Bilirubin on the Johnson & Johnson Vitros System as demonstrated by results obtained in the studies.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

SEP 16 1998

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

Linda Morris  
Senior Regulatory Affairs Specialist  
Abbott Laboratories  
1920 Hurd Drive  
Irving, Texas 75038

Re: K983133  
Total Bilirubin  
Regulatory Class: II  
Product Code: CIG, JIX  
Dated: September 4, 1998  
Received: September 8, 1998

Dear Ms. Morris:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

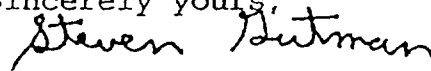
If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

Under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88), this device may require a CLIA complexity categorization. To determine if it does, you should contact the Centers for Disease Control and Prevention (CDC) at (770) 488-7655.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4588. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "<http://www.fda.gov/cdrh/dsmamain.html>".

Sincerely yours,



Steven I. Gutman, M.D., M.B.A.  
Director  
Division of Clinical  
Laboratory Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

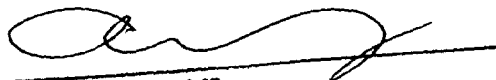
Enclosure

510(k) Number (if known): K983133

Device Name: Total Bilirubin

Indications For Use:

The Total Bilirubin assay is used for the quantitation of total bilirubin in human serum or plasma. Measurement of bilirubin, an organic compound formed during the normal and abnormal destruction of red blood cells, is used in the diagnosis and treatment of liver, hemolytic hematological, and metabolic disorders, including hepatitis and gall bladder block.

  
(Division Sign-Off)  
Division of Clinical Laboratory Devices  
510(k) Number K983133

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

\_\_\_\_\_  
Concurrence of CDRH, Office of Device Evaluation (ODE)  
Prescription Use ☒ OR Over-The-Counter Use \_\_\_\_\_  
(Per 21 CFR 801.109)

(Optional Format 1-2-96)